

## SYSTEM STUDY: Jefferson Davis Republic Landfill – Louisiana



### FAST FACTS

#### Project:

- ✓ bioFAS™ MBBR System for Landfill Leachate

#### Industry:

- ✓ Landfill Leachate

#### Application:

- ✓ Biochemical Oxygen Demand (BOD) Removal
- ✓ Nitrification of Ammonia

### bioFAS™ MBBR System

#### Benefits/Highlights:

- ◆ Efficient reduction of BOD
- ◆ Ideal for high and varying loads
- ◆ Cost-effective
- ◆ Compact footprint & modular
- ◆ Easy to operate & maintain

#### Problem:

The Jefferson Davis Republic Landfill was experiencing high concentrations of ammonia in the leachate from their domestic landfill and needed to meet compliance standards for direct discharge.

#### Solution:

bioprocessH<sub>2</sub>O supplied a single stage bioFAS™ Moving Bed Biofilm Reactor (MBBR) biological treatment process to remove ammonia from the aerobic lagoon effluent.

#### Status/Results:

The bioFAS™ MBBR System effectively nitrifies ammonia allowing the landfill to remain in compliance with the effluent discharge requirements.

#### System Design Criteria:

Parameter	Influent	Effluent
Wastewater Flow	50,000 GPD	-
BOD	3,250 mg/L	≤100 mg/L
Ammonia	< 40 mg/L	≥11 lbs. ammonia removal/day

**Contact bioprocessH<sub>2</sub>O today!**

